## American Inventors of the Late 19th Century

Social Studies

Performance Event Grades 9-12 by

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St. Louis MAP Regional Center

# American Inventors of the Late 19th Century

**Purpose:** This performance event requires that students recognize the process used by great inventors. Inventors have recognized a problem or need and have created and marketed a product to solve the problem or meet the need. Students will be required to replicate the process used by great inventors of the 19th century to design an "invention" that will solve a contemporary problem or meet a need. They will write an explanation that describes how the device meets the need or solves the problem and discusses the feasibility of making the product in relation to ease and cost of production.

#### **Show-Me Standards Addressed:**

Knowledge: SS4

Performance: 3.1, 3.3, 4.1

Grade Range: 9-12

**Subject:** Social Studies

Materials Needed: pencils, markers, drawing paper, rulers, textbook

**Time Needed for the Event:** 30 Minutes

**Instructions for Administration:** The event may be completed individually as an assessment or can be used as a classroom activity and completed in cooperative learning groups. Provide students with a copy of the Student Event Packet which contains the Student Prompt, the Response Sheets, and the Scoring Guide. Make sure the students understand what is expected by going over the prompt and scoring guide.

**Pre-assessment Instructions:** The student will need to have the prior knowledge of the process used by and of the inventions of the great inventors of the 19th century. They will also need to have an understanding of the ecomonic principles of supply, demand, and cost of production. This event will act as culminating assessment or activity after studying the above.

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#### **Student Prompt**

You will have 30 minutes to complete this activity. First, you should think of a problem or need that exists in the real world. Then, you will design a device to solve the problem or meet that need. You will use the Student Response Sheet #1 to draw a picture of your invention. Be sure to label the parts of your invention so it can be clearly understood. Finally, you will need to write an explanation that successfully promotes your product by clearly explaining how your "invention" solves the problem or meets the need and would be easy and economical to make.

You will be assessed on the following:

- \* Need- The problem you have identified is one that virtually everyone would pay money to solve.
- \* Originality- Your invention is totally original. It does not borrow parts from or resemble an existing product.
- \* Justification- Your explanation clearly explains how your product could be made easily and economically and justifies how it solves the problem or meets the need.
- \* Presentation-Your design drawing and written explanation are interesting and successfully promote the product.

## Student Response Sheet #1

Draw a picture of your invention. Be sure to label the parts of your invention so it can be clearly understood.

## Student Response Sheet #2

Write an explanation that successfully promotes your product and clearly explains how your "invention" solves the problem or meets the need and can be made easily and economically.

### American Inventors of the Late 19th Century Scoring Guide

- \*The need or problem identified is a genuine one that most people would pay money to solve. (3.1)
  - \*The device is totally original and solves the problem or meets the need. (3.2)
  - \*The explanation clearly and creatively describes how the product could be made easily and economically and justifies how it solves the problem or meets the need. (4.1)
  - \*Together, the drawing and written explanation generate interest in creative ways and successfully promote the product. (SS4)
- 3 \*The need or problem identified is a genuine one that most people would pay money to solve. (3.1)
  - \*The device is different in most respects but has elements of existing products. It does solve the problem or meets the need. (3.2)
  - \*The explanation describes how the product could be made easily and economically and justifies how it solves the problem or meets the need. (4.1)
  - \*Together, the drawing and written explanation generate interest and promote the product. (SS4)
- \*The need or problem identified is an aggravation but most people would not pay money to solve it. (3.1)
  - \*The device may or may not solve the problem and/or is too similar to an already existing product. (3.2)
  - \*The explanation partially justifies the need for the device and may or may not address the issues of ease and cost of production. (4.1)
  - \*Together, the drawing and written explanation, may or may not generate interest and partially promotes the product. It lacks focus and seems somewhat confusing to the reader. (SS4)
- 1 \*The need or problem identified is not a common one. (3.1)
  - \*The device does not solve the problem and/or is identical to an already existing product. (3.2)
  - \*The explanation does not justify the need for the device or address the ease or cost of production. (4.1)
  - \*Together, the drawing and written explanation, do not generate interest or successfully promote the product. It is poorly organized and incomprehensible. (SS4)
- Off Task or No Attempt